



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/507,397

09/13/2005

Tord Haulin

15436.861.25a.1

3095

22913

7590

01/12/2009

Workman Nydegger
1000 Eagle Gate Tower
60 East South Temple
Salt Lake City, UT 84111

EXAMINER

SNYDER, STEVEN G

ART UNIT

PAPER NUMBER

2184

MAIL DATE

DELIVERY MODE

01/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/507,397	Applicant(s) HAULIN ET AL.	
	Examiner STEVEN G. SNYDER	Art Unit 2184	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is in response to the request for continued examination filed on October 31, 2008.

Status of Claims

Claims 1 to 27 are pending, of which claims 1 and 15 are in independent form.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 31, 2008 has been entered.

Response to Arguments

2. Applicant's arguments filed October 31, 2008 have been fully considered but they are not persuasive.

Applicant argues, on page 11 lines 17 - 24, that the system of the Anderson reference requires three devices, while

Art Unit: 2184

applicant's claim 1 only recites a communication module that communicates over a local wireless access with no recitation of sending the content to another host.

While it is true that Anderson discloses a method involving sending content to another host, Anderson also shows how the printer can receive data through the wireless IR port (203) and print without sending the content to another host (209) in Fig. 2. As stated in the previous office action, the host computer sending a print job to the printer by way of the printer card 139 and the host interface 153 is considered the primary function of the printer. Also, a portable device 166 sending a print job to the printer by way of the portable device communication port 159 and port interface 163 is considered to be the secondary wireless access. Finally, as shown in Fig. 2, these two functions can be independent of one another when the print job from the portable device is ready for printing (no rendering needed).

Applicant argues, on page 11 line 25 - page 12 line 9, that the primary purpose of Anderson's system is to print a document to a printer and this cannot be achieved without receiving a document over the portable device communications port.

Applicant further states that "While the Office Action has added

Art Unit: 2184

specific references to Anderson, the Office Action has still not explicitly addressed how the portable device communications port is independent of the primary function of the system disclosed in Anderson as the primary purpose cannot be achieved without receiving the document in the first place."

The examiner disagrees. As shown in Fig. 1 and as is commonly known, a host computer can send print jobs to a printer by using a printer card and the printer's host interface. Further, the previous office action states "Anderson's printer communicating with a host computer to implement general functions of a printer is considered to be equivalent to applicant's communication module performing a primary function. Also, Anderson's printer communicating with a portable device through a portable device communications port is considered to be equivalent to applicant's secondary function." Finally, as shown in Fig. 2, these two functions can be independent of one another when the print job from the portable device is ready for printing (no rendering needed).

Applicant argues, on page 12 lines 10 - 18, that "Receiving a non-rendered document over a portable device communications port fails to teach or suggest that the content of the first digital storage unit can be modified to change the primary

Art Unit: 2184

function of the printing system" and "There is no teaching or suggestion that the primary function of the communication module is modified by a non-rendered document."

The previous office action never cited Anderson as disclosing these limitations. The previous office action states "Anderson does not appear to explicitly disclose the secondary function "involving control of the primary function" or "the local wireless access enables the content of the first digital storage unit to be modified to change the primary function of the communication module to accomplish the primary function." As applicant states on page 12 lines 19 - 21, Parry was cited to teach these limitations. Therefore, the argument that Anderson does not teach these limitations is moot.

Applicant argues, on page 12 lines 19 - 29, that the device described by Parry does not change the primary function because print job queuing, print job pause, print job continue, and the like are part of the primary function of printing. Applicant states that the primary function is still printing from a host as acknowledged by the office action.

As per the above responses, the examiner agrees that the primary function of a printer is printing jobs from a host. Therefore, wireless communication with the printer is considered

Art Unit: 2184

to be a secondary function of the printer. Further, causing a print job from a host to be paused, continued, etc is affecting the primary function of the printer. Again, both Anderson and Parry disclose wirelessly communicating with a printer. These wireless accesses can be independent of the printer's primary function of printing from a host computer since the wireless access of Parry does not involve the host's access port and the wireless port of Anderson does not involve the host's interface when a wirelessly sent document is print ready.

Applicant argues, on page 13 lines 1 - 14, that Yukie fails to remedy the deficiencies of Anderson and Parry.

Yukie is cited in the previous office action to show security measures being used over wireless port communications. As per the arguments above, the examiner does not agree that Anderson is deficient in showing the limitation of a primary function and a secondary function that are independent. Also, as per the arguments above, the examiner does not agree that Parry is deficient in showing the limitation of changing the primary function of the printer over a secondary communication port.

Art Unit: 2184

Applicant argues, on page 13 lines 15 - 18, that independent claims 1 and 15 are patentable over the cited art for the reasons discussed above, and all dependent claims are also patentable based on their dependencies.

The examiner disagrees since the above arguments are not persuasive, no claims are believed to be patentable over the cited art.

3. Applicant's arguments with respect to newly added claim 27 have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2184

Claims 1 - 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al., U.S. Patent 6,892,251 (hereinafter referred to as Anderson) in view of Parry, U.S. Patent Application 2002/0093424 (hereinafter referred to as Parry).

As per claim 1, Anderson discloses "A communication module adapted to be removably connected to a node in a communications network" (column 3 lines 39 - 53, local printer 116 includes host interface 153 that provides a connection to the printer card 139 of the host computer 103. Also, column 3 line 63 - column 4 line 9, printer 116 includes portable device communications port 159, which may be an infrared port. Also, column 4 line 66 - column 5 line 8, processors 123 and 143 may represent multiple processors in a network), "the module being adapted to perform a primary function pertaining to an over-all operation of the module and a secondary function" (column 3 lines 39 - 53 and column 4 lines 28 - 36, printer 116 includes a host interface 153 and an internal processor 143 helps to implement general functions of a local printer). Anderson's printer communicating with a host computer using printer card and host interface to implement general functions of a printer is considered to be equivalent to applicant's communication

Art Unit: 2184

module performing a primary function. Also, Anderson's printer communicating with a portable device through a portable device communications port is considered to be equivalent to applicant's secondary function.

Anderson also discloses "the communication module comprising: a network interface, wherein the communication module performs the primary function over the network via the network interface" (Fig. 1, host interface 153 connected to printer card 139 in host computer 103, column 3 lines 39 - 53 and column 4 lines 28 - 36, printer 116 includes a host interface 153 and an internal processor 143 helps to implement general functions of a local printer) "a first digital storage unit (M1) adapted to hold content information pertaining to accomplishment of the primary function" (memory 146 and column 4 lines 28 - 36). Anderson further discloses "at least one optical interface and is adapted to provide a local wireless access to the first digital storage unit, the local wireless access being provided independently of the primary function" (Fig. 1, a portable device can connect to the printer through a portable device communication port, and therefore be connected to the printer's memory. Also, column 3 line 63 - column 4 line 9, how the portable device communications port may be an infrared port).

Anderson does not appear to explicitly disclose the infrared port being bi-directional.

However, Parry discloses a bi-directional infrared connection between a printer and a portable device ([0007], multi-function wireless communications device functions to transmit and receive data).

Anderson also does not appear to explicitly disclose the secondary function "involving control of the primary function" or "the local wireless access enables the content of the first digital storage unit to be modified to change the primary function of the communication module to accomplish the primary function."

However, Parry discloses a portable device acting as a remote control to a printer ([0005]). Parry further discloses the wireless remote printer control controlling various control panel functions of the printer including print job queuing, print job pause, print job continue, and other functions ([0007]). Therefore, the device acting as a remote control inherently modifies the content of the digital storage unit to change the primary function (printing from the host computer).

Anderson and Parry are analogous art because they are from the same field of endeavor, which is printers with infrared secondary ports.

Art Unit: 2184

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson and Parry before him or her, to modify the teachings of Anderson to include the teachings of Parry so that the portable device can use the bi-directional infrared port to change the characteristics that control printing over the primary interface.

The motivation for doing so would have been to allow a user to control printing characteristics without interacting with the control panel of the printer itself (as discussed by Parry in [0007]).

Therefore, it would have been obvious to combine Parry with Anderson to obtain the invention as specified in the instant claim.

As per claim 2, Anderson discloses how a user can send a document stored on the portable device to the printer for printing (column 5 lines 9 - 16).

Anderson does not appear to explicitly disclose the portable device reading out data from the printer's storage unit.

However, Parry discloses data being sent from the printer to the device that is acting as a remote control ([0007]).

Anderson and Parry are analogous art because they are from the same field of endeavor, which is printers with infrared secondary ports.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson and Parry before him or her, to modify the teachings of Anderson to include the teachings of Parry so that the portable device can use the bi-directional infrared port to receive data from the printer.

The motivation for doing so would have been to allow a user to receive status and function data about the printer (as disclosed by Parry in [0007]).

Art Unit: 2184

Therefore, it would have been obvious to combine Parry with Anderson to obtain the invention as specified in the instant claim.

As per claim 3, Anderson discloses "allow updating of the contents of the first digital storage unit." (column 5 lines 9 - 16 and column 6 lines 50 - 57, a user can send a document stored on the portable device to the printer for printing without any communication to the host computer). Further, it is well known in the art that a printer buffer would be used to store the data to be printed.

Anderson does not appear to explicitly disclose the infrared port being bi-directional.

However, Parry discloses a bi-directional infrared connection between a printer and a portable device ([0007], multi-function wireless communications device functions to transmit and receive data).

Anderson and Parry are analogous art because they are from the same field of endeavor, which is printers with infrared secondary ports.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson and Parry before him or her, to modify the teachings of

Art Unit: 2184

Anderson to include the teachings of Parry so that the portable device can use the bi-directional infrared port to change the characteristics that control printing over the primary interface.

The motivation for doing so would have been to allow a user to control printing characteristics without interacting with the control panel of the printer itself (as discussed by Parry in [0007]).

Therefore, it would have been obvious to combine Parry with Anderson to obtain the invention as specified in the instant claim.

As per claim 4, Anderson shows the printer containing a memory (Fig. 1).

Anderson does not appear to explicitly disclose the printer containing a register including status data that can be queried.

However, Parry discloses the printer transmitting command responses to the portable device over the infrared port ([0007]). These responses can include "appliance status data" ([0007]). Although Parry does not appear to explicitly disclose storing the status in a register, it is well known in the art to use registers for storing data.

Anderson and Parry are analogous art because they are from the same field of endeavor, which is printers with infrared secondary ports.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson and Parry before him or her, to modify the teachings of Anderson to include the teachings of Parry so that the portable device can use the bi-directional infrared port to query the printer for its status.

The motivation for doing so would have been to allow a user to learn the printer's status without interacting with the

Art Unit: 2184

control panel of the printer itself (as discussed by Parry in [0007]).

Therefore, it would have been obvious to combine Parry with Anderson to obtain the invention as specified in the instant claim.

As per claim 5, Anderson discloses how the memory of the printer may include both volatile and nonvolatile memory components (column 4 lines 46 - 47).

Anderson does not appear to explicitly disclose the printer containing a register including status data that can be queried.

However, Parry discloses the printer transmitting command responses to the portable device over the infrared port ([0007]). These responses can include "appliance status data" ([0007]). Although Parry does not appear to explicitly disclose storing the status in a register, it is well known in the art to use registers for storing data.

Anderson does not appear to explicitly disclose the bi-directional interface being adapted to receive a command and alter a parameter in the register pertaining to the accomplishment of a function.

However, Parry discloses the portable device transmitting control data to the printer via the bi-directional infrared port

Art Unit: 2184

([0007]). Therefore, the printer's status would be altered and the updated in the memory.

Anderson and Parry are analogous art because they are from the same field of endeavor, which is printers with infrared secondary ports.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson and Parry before him or her, to modify the teachings of Anderson to include the teachings of Parry so that the portable device can use the bi-directional infrared port to change the printer's function and status.

The motivation for doing so would have been to allow a user to control the printer without interacting with the control panel of the printer itself (as discussed by Parry in [0007]).

Therefore, it would have been obvious to combine Parry with Anderson to obtain the invention as specified in the instant claim.

As per claim 6, the limitations of this claim are equivalent to the limitations of claim 5, with the exception of introducing a second digital storage unit and a third register in the first digital storage unit.

Art Unit: 2184

Anderson discloses the memory of the printer may include both volatile and nonvolatile memory components (column 4 lines 46 - 47). Also, Anderson discloses "a second digital storage unit (M2) adapted to temporarily store information pertaining to the accomplishment of the primary function" and "is adapted to store the at least one piece of information in the second digital storage unit" (column 4 line 66 - column 5 line 8, memories 126 and 146 may represent multiple memories).

Anderson does not appear to explicitly disclose the printer containing status registers.

However, Parry discloses the printer transmitting command responses to the portable device over the infrared port ([0007]). These responses can include "appliance status data" ([0007]). Although Parry does not appear to explicitly disclose storing the status in a register, it is well known in the art to use registers for storing data.

Anderson and Parry are analogous art because they are from the same field of endeavor, which is printers with infrared secondary ports.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson and Parry before him or her, to modify the teachings of Anderson to include the teachings of Parry so that the portable

Art Unit: 2184

device can use the bi-directional infrared port to change the printer's function and status.

The motivation for doing so would have been to allow a user to control the printer without interacting with the control panel of the printer itself (as discussed by Parry in [0007]).

Therefore, it would have been obvious to combine Parry with Anderson to obtain the invention as specified in the instant claim.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Parry, as applied to claims 1 - 6 above, and further in view of Roohparvar, U.S. Patent 6,785,765 (hereinafter referred to as Roohparvar).

As per claim 7, neither Anderson nor Parry discloses altering the contents of the third register based on information in the second digital storage unit after a reset.

However, Roohparvar achieves the aspect of one register's contents being loaded into another register during initialization ([0052]).

Anderson, Parry, and Roohparvar are analogous art because they are from the same field of endeavor, which is communications between devices with memory.

Art Unit: 2184

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson, Parry, and Roohparvar before him or her, to modify the teachings of Anderson and Parry to include the teachings of Roohparvar so that the contents of one register are copied into another register as part of an initialization process.

The motivation for doing so would have been to copy data stored in a slower memory into a faster memory in order to decrease operation time (Roohparvar [0007], certain types of memory operate at higher clock speeds than others).

Therefore, it would have been obvious to combine Roohparvar with Parry and Anderson to obtain the invention as specified in the instant claim.

Claims 8, 9, 11, 15, 17, 18, 22, 23, and 25 - 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Parry, as applied to claims 1 - 6 above, and further in view of Yukie et al., U.S. Patent 6,956,833 (hereinafter referred to as Yukie).

As per claim 8, neither Anderson nor Parry appears to explicitly disclose using any security measures.

However, Yukie discloses a data server made to include security or conditional access systems (column 4 lines 1 - 22).

Anderson, Parry, and Yukie are analogous art because they are from the same field of endeavor, which is wireless port communications.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson, Parry, and Yukie before him or her, to modify the teachings of Anderson and Parry to include the teachings of Yukie so that the bi-directional infrared port utilizes a security system.

The motivation for doing so would have been to only allow authorized users to control the system.

Therefore, it would have been obvious to combine Yukie with Parry and Anderson to obtain the invention as specified in the instant claim.

As per claim 9, neither Anderson nor Parry appears to explicitly disclose using any security measures.

However, Yukie discloses a data server made to include password access only. (column 4 lines 1 - 22).

Anderson, Parry, and Yukie are analogous art because they are from the same field of endeavor, which is wireless port communications.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson, Parry, and Yukie before him or her, to modify the teachings of Anderson and Parry to include the teachings of Yukie so that the bi-directional infrared port utilizes a security system.

The motivation for doing so would have been to only allow authorized users to control the system.

Therefore, it would have been obvious to combine Yukie with Parry and Anderson to obtain the invention as specified in the instant claim.

As per claim 11, neither Anderson nor Parry appears to explicitly disclose using any security measures.

However, Yukie discloses a data server made to include conditional access. (column 4 lines 1 - 22). Also, Yukie describes a user sending identification information to gain access to the storage device (column 13 lines 1 - 22).

Anderson, Parry, and Yukie are analogous art because they are from the same field of endeavor, which is wireless port communications.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson, Parry, and Yukie before him or her, to modify the teachings of Anderson and Parry to include the teachings of Yukie so that the bi-directional infrared port utilizes a security system that requires the portable device to send its identification information before it can manipulate the system.

The motivation for doing so would have been to only allow authorized users to control the system.

Therefore, it would have been obvious to combine Yukie with Parry and Anderson to obtain the invention as specified in the instant claim.

Art Unit: 2184

As per claim 15, the limitations of this claim that state, "A method of communicating with a communication module being removably connected to a node in a communications network, the module being adapted to perform a primary function pertaining to an over-all operation of the module and a secondary function involving control of the primary function," "exchanging data between the module and the portable software carrier unit via a bi-directional optical interface, the data including information pertaining to accomplishment of the primary function and being exchanged independently of the primary function" and "modifying content of a first digital storage using the data received over the bi-directional optical interface, the data used to accomplish the primary function" have been addressed in the rejection to claim 1 above. Therefore, the rejection to claim 1 applies to this claim as well.

Art Unit: 2184

The limitation of this claim that states "receiving the authorization signal in the module" has been addressed in the rejection to claim 8 above. Therefore, the rejection to claim 8 applies to this claim as well.

Further, Anderson does not appear to explicitly disclose receiving a signal from a "portable software carrier unit while performing the primary function over the network via a network interface of the communication module."

However, Parry discloses a portable device being used as a remote control being able to control the printer by pausing and continuing print jobs, as well as other controls ([0007]). Therefore, while a job sent from the host computer is printing, the portable device can send control commands or signals to the printer.

Anderson and Parry are analogous art because they are from the same field of endeavor, which is printers with infrared secondary ports.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson and Parry before him or her, to modify the teachings of Anderson to include the teachings of Parry so that the portable device can use the bi-directional infrared port to change the

Art Unit: 2184

characteristics that control printing over the primary interface.

The motivation for doing so would have been to allow a user to control printing characteristics without interacting with the control panel of the printer itself (as discussed by Parry in [0007]).

Neither Parry nor Anderson appears to explicitly disclose "receiving an authorization signal in the module."

However, as stated above, this limitation is equivalent to the limitations of claim 8. Therefore, as stated in the rejection to claim 8 above, Yukie discloses a data server made to include security or conditional access systems (column 4 lines 1 - 22).

Anderson, Parry, and Yukie are analogous art because they are from the same field of endeavor, which is wireless port communications.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson, Parry, and Yukie before him or her, to modify the teachings of Anderson and Parry to include the teachings of Yukie so that the bi-directional infrared port utilizes a security system.

Art Unit: 2184

The motivation for doing so would have been to only allow authorized users to control the system.

Therefore, it would have been obvious to combine Yukie with Parry and Anderson to obtain the invention as specified in the instant claim.

Note, claim 17 recites the corresponding limitations of claim 11. Therefore, the rejection of claim 11 applies to claim 17.

Note, claim 18 recites the corresponding limitations of claim 9. Therefore, the rejection of claim 9 applies to claim 18.

Note, claim 22 recites the corresponding limitations of claim 3. Therefore, the rejection of claim 3 applies to claim 22.

Note, claim 23 recites the corresponding limitations of claim 5. Therefore, the rejection of claim 5 applies to claim 23.

Note, claim 25 recites the corresponding limitations of claim 2. Therefore, the rejection of claim 2 applies to claim 25.

Note, claim 26 recites the corresponding limitations of claim 4. Therefore, the rejection of claim 4 applies to claim 26.

As per claim 27, neither Anderson nor Parry nor Yukie appears to explicitly disclose "the primary function is a first primary function and wherein modifying content of the first digital storage using the data received over the bi-directional optical interface changes the first primary function to a second primary function."

However, Parry does disclose a preferred embodiment of a wireless communications device being a wireless remote printer control ([0007]).

Also, multi-function printer (or all-in-one printer/scanner/fax/copier) units are known to one of ordinary skill in the art at the time of the invention.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Parry's

Art Unit: 2184

wireless communication device so that the device would be capable of choosing a function from the functions provided by a multi-function printer unit.

This would provide a means for utilizing Parry's disclosed device with a newer and widely used multiple functionality printer.

Claims 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Parry, and further in view of Yukie, as applied to claims 8, 9, 11, 15, 17, 18, 22, 23, and 25 - 27 above, and further in view of Nakaoka et al., U.S. Patent Application 2007/0027990 (hereinafter referred to as Nakaoka).

As per claim 10, neither Anderson nor Parry nor Yukie appears to explicitly disclose using an address field to designate a specific module position.

However, Nakaoka discloses using an address to identify a client ([0075]).

Anderson, Parry, Yukie, and Nakaoka are analogous art because they are from the same field of endeavor, which is communication between electrical devices.

Art Unit: 2184

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson, Parry, Yukie, and Nakaoka before him or her, to modify the teachings of Anderson, Parry, and Yukie to include the teachings of Nakaoka so that the authorization signal includes an address.

The motivation for doing so would have been to only allow authorized users to control the system.

Therefore, it would have been obvious to combine Nakaoka with Anderson, Parry, and Yukie to obtain the invention as specified in the instant claim.

Note, claim 16 recites the corresponding limitations of claim 10. Therefore, the rejection of claim 10 applies to claim 16.

Claims 12 - 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Parry, and further in view of Yukie, and further in view of Nakaoka, as applied to claims 10 and 16 above, and further in view of Benjamin et al., U.S. Patent 5,668,654 (hereinafter referred to as Benjamin).

As per claims 12 - 14, neither Anderson nor Parry nor Yukie nor Nakaoka specifically teach using LEDs to indicate states of the bi-directional interface.

However, Benjamin discloses using LEDs to indicate receiving data or transmitting data. Futher, Benjamin describes how any operational state can be indicated using LEDs (column 5 lines 48 - 58).

Anderson, Parry, Yukie, Nakaoka, and Benjamin are analogous art because they are from the same field of endeavor, which is communication between electrical devices.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson, Parry, Yukie, Nakaoka, and Benjamin before him or her, to modify the teachings of Anderson, Parry, Yukie, and Nakaoka to include the teachings of Benjamin so that LEDs indicate status.

The motivation for doing so would have been to display status information without having to go to the front panel.

Therefore, it would have been obvious to combine Benjamin with Anderson, Parry, Yukie, and Nakaoka to obtain the invention as specified in the instant claim.

Art Unit: 2184

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Parry, and further in view of Yukie, as applied to claims 8, 9, 11, 15, 17, 18, 22, 23, and 25 - 27 above, and further in view of Kefford et al., U.S. Patent Application 2003/0204726 (hereinafter referred to as Kefford).

As per claims 19 and 20, neither Anderson nor Parry nor Yukie appears to explicitly disclose using a password with a static and dynamic segment for conditional access.

However, Kefford discloses secure transmission of data with a mobile device by sending passwords and using static encryption keys or dynamic encryption keys ([0032]). Kefford teaches using static or dynamic encryption keys, therefore, splitting a password so that both static and dynamic encryption keys are used, would be obvious to one of ordinary skill in the art.

Anderson, Parry, Yukie, and Kefford are analogous art because they are from the same field of endeavor, which is communications with a portable device.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson, Parry, Yukie, and Kefford before him or her, to modify the teachings of Anderson, Parry, and Yukie to include the

Art Unit: 2184

teachings of Kefford so that the password would use static and dynamic encryption keys.

The motivation for doing so would have been to provide a further level of security.

Therefore, it would have been obvious to combine Kefford with Anderson, Parry, and Yukie to obtain the invention as specified in the instant claim.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Parry, and further in view of Yukie, as applied to claims 8, 9, 11, 15, 17, 18, 22, 23, and 25 - 27 above, and further in view of Want et al., U.S. Patent 5,564,070 (hereinafter referred to as Want).

As per claim 21, the limitation of this claim that states, "data which is to update the contents of the first digital storage," is equivalent to the limitation of claim 3. Therefore, the rejection to claim 3 applies to this claim as well.

Art Unit: 2184

Also, neither Anderson nor Parry nor Yukie appears to explicitly disclose sending a checksum along with the password.

However, Want discloses using a checksum in infrared communication to verify that data sent is equivalent to data received (Table 1 in column 10).

Anderson, Parry, Yukie, and Want are analogous art because they are from the same field of endeavor, which is communication between electrical devices.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson, Parry, Yukie, and Want before him or her, to modify the teachings of Anderson, Parry, and Yukie to include the teachings of Want so that a checksum is sent.

The motivation for doing so would have been to verify that the data was received correctly.

Therefore, it would have been obvious to combine Want with Anderson, Parry, and Yukie to obtain the invention as specified in the instant claim.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Parry, and further in view of Yukie, as applied to claims 8, 9, 11, 15, 17, 18, 22, 23, and

Art Unit: 2184

25 - 27 above, and further in view of Roohparvar, U.S. Patent 6,785,765 (hereinafter referred to as Roohparvar).

As per claim 24, the limitations of the instant claim that state, "receiving at least one piece of information pertaining to the accomplishment of the primary function via the bi-directional interface; storing temporarily the at least one piece of information in a second digital storage unit," are equivalent to the limitations of claim 6. Therefore, the rejection to claim 6 applies to this claim as well.

Also, neither Anderson nor Parry nor Yukie appears to explicitly disclose altering the contents of the third register based on information in the second digital storage unit after a reset.

However, Roohparvar discloses one register's contents being loaded into another register during initialization ([0052]).

Anderson, Parry, Yukie, and Roohparvar are analogous art because they are from the same field of endeavor, which is communications between devices with memory.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Anderson, Parry, Yukie, and Roohparvar before him or her, to modify the teachings of Anderson, Parry, and Yukie to include

Art Unit: 2184

the teachings of Roohparvar so that the contents of one register are copied into another register as part of an initialization process.

The motivation for doing so would have been to copy data stored in a slower memory into a faster memory in order to decrease operation time (Roohparvar [0007], certain types of memory operate at higher clock speeds than others).

Therefore, it would have been obvious to combine Roohparvar with Anderson, Parry, and Yukie to obtain the invention as specified in the instant claim.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Applications **2001/0023461** and **2003/0067738** disclose remotely controlling multi-function devices.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN G. SNYDER whose telephone number is (571)270-1971. The examiner can normally be reached on Mon. - Thurs. 9:30 AM - 6:00 PM.

Art Unit: 2184

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Henry Tsai can be reached on (571) 272-4176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.S.

**/Henry W.H. Tsai/
Supervisory Patent Examiner, Art Unit 2184**